11

1

2

1

2

1

2

PATENT PU010117

Office Action dated: June 9, 2005 Response dated: September 6, 2005

Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (currently amended) A signal processing system comprising: 1 2 means for providing a first signal intrinsic to an integrated circuit: means for providing a first operational function to the first signal, said function 3 4 being provided at a pin of the integrated circuit, 5 means for providing a second operational function to the first signal by the 6 integrated circuit to produce a third signal representative of the first signal at an output 7 of the second operational function providing means, and 8 means for coupling a second signal extrinsic of the integrated circuit to the pin of 9 the integrated circuit so that the means for providing the second operational function 10 operates on the second signal to produce a fourth signal representative of the second
 - 2. (currently amended) The signal <u>processing system</u> processor of claim 1 wherein the first and second signals are analog audio signals.

signal at the output of the second operational function providing means.

- 3. (original) The signal processing system of claim 1 wherein the first operational function is de-emphasis and the second operational function is a variable attenuator.
- 4. (original) The signal processing system of claim 1 wherein the second signal is switchable "in" and "out", and when switched "in", the first signal is switched "off".

CUSTOMER NO.: 24498

Serial No.: '09/973,264

Office Action dated: June 9, 2005

Response dated: September 6, 2005

PATENT PU010117

1 5. (original) The signal processing system of claim 1 wherein the pin serves as a 2 bi-directional conduit for signals. 1 6. (currently amended) A signal processing system comprising: 2 means for providing a first operational function to a first signal at a pin of an integrated circuit, the first signal being intrinsic to the integrated circuit, and 3 means for coupling a second signal extrinsic of the integrated circuit to the pin of 4 5 the integrated circuit so that a means within the integrated circuit for providing a second 6 operational function operates on the second signal, wherein the second signal is switched "in" and "out" at the pin, and when the second signal is 7 switched "in", the first signal is disabled at the pin. 8 7. (currently amended) The signal processing system processor of claim 6 1 wherein the first and second signals are analog audio signals. 2 1 8. (original) The signal processing system of claim 6 wherein the first operational 2 function is de-emphasis and the second operational function is a variable attenuator. 1 9. (cancelled) 10. (original) The signal processing system of claim 6 wherein the pin serves as 1 2 a bi-directional conduit for signals. 1 11. (original) A signal processing system comprising: 2 means for providing an operational function to a first signal at a pin of an 3 integrated circuit, the first signal being intrinsic to the integrated circuit, and 4 means for coupling a second signal extrinsic of the integrated circuit to the pin of 5 the integrated circuit,

Serial No.: 09/973,264
Office Action dated: June 9, 2005
Response dated: September 6, 2005

6	the coupling of the second signal to the pin switching "off" the presence of the
7	first signal at the pin.
1	12. (currently amended) The signal processing system processor of claim 11
2	wherein the first and second signals are analog audio signals.
1	13. (original) The signal processing system of claim 11 wherein the first
2	operational function is de-emphasis.
1	14. (original) The signal processing system of claim 11 wherein the pin serves as
2	a bi-directional conduit for signals.
1	15. (original) A signal processing system comprising:
2	means for providing a first signal intrinsic to an integrated circuit;
3	means for providing a first operational function to the first signal at a pin of the
4	integrated circuit,
5	means for providing a second operational function to the first signal by the
6	integrated circuit, and
7	means for coupling a second signal extrinsic of the integrated circuit to the pin of
8	the integrated circuit so that the means for providing the second operational function
9	operates on the second signal,
10	the second signal being switchable "in" and "out", and when switched "in" the
11	first signal is switched "off" at the pin.
1	16. (original) The signal processing system of claim 15 wherein the pin serves as
2	a bi-directional conduit for signals.
1	17. (currently amended) The A signal processing system of claim 15 wherein
2	comprising:

· CUSTOMER NO.: 24498 Serial No.: '09/973.264

Office Action dated: June 9, 2005

PATENT PU010117

Response dated: September 6, 2005

3 means for providing a first signal intrinsic to an integrated circuit; 4 means for providing a first operational function to the first signal at a pin of the 5 integrated circuit, means for providing a second operational function for the first signal by the 6 7 integrated circuit, and 8 means for coupling a second signal extrinsic of the integrated circuit at the pin so 9 that the means for providing the second operational function operates on the second 10 signal, 11 the pin serves serving as a bi-directional conduit for signals, 12 the second signal being switchable "in" and "out", and when switched "in", the first signal is switched "off" at the pin. 13 18. (currently amended) A circuit for switchably coupling a signal comprising: 1 2 first and second transistors each having respective base/gate electrode. 3 emitter/source and collector/drain electrodes, the two transistors being of the same 4 conductivity type and connected in series between a voltage supply and a reference 5 point, 6 in a signal coupling mode, the signal output coupling being from the first 7 emitter/source electrode, the second collector/drain electrode being coupled to the first 8 emitter/source electrode through a resistor, the first emitter/source electrode being at a 9 first impedance with respect to the reference point and 10 the first base/gate having bias means and receiving the input signal with the bias 11 means placing the first transistor in a linear signal transmission state, and the output

CUSTOMER NO.: 24498 Serial No.: *09/973,264*

12

13

14

15

16

17

18

19

20

Office Action dated: June 9, 2005 Response dated: September 6, 2005 PATENT PU010117

signal being coupled out by the first emitter/source, the bias means also biasing the second base/gate electrode so that the second transistor is in a saturated state,

the circuit being switchable from the signal coupling mode to a non-signal coupling mode by the bias means placing the first transistor in a cutoff state so that the first transistor is rendered non-coupling for the signal, the bias means also placing the second transistor in a cutoff state so that via action of the second collector/drain electrode, the first emitter/source electrode is switched to be at a second high impedance higher than the first impedance with respect to the reference point thus removing impedance loading by the first emitter/source electrode.